

Title (en)

Electric double layer capacitor and method for producing the same

Title (de)

Elektrischer Doppelschichtkondensator und Herstellungsverfahren

Title (fr)

Condensateur électrolytique à double couche et son procédé de fabrication

Publication

EP 0984471 A2 20000308 (EN)

Application

EP 99117252 A 19990902

Priority

JP 24964098 A 19980903

Abstract (en)

Disclosed is an electric double layer capacitor comprising polarizable electrodes (24, 26) immersed in an organic electrolyte (40), wherein a carbon material for forming the polarizable electrode (24, 26) is a carbon material including graphite-like microcrystalline carbon (94) produced by effecting a heat treatment together with at least one of an alkali metal and an alkali metal compound at not less than a temperature at which alkali metal vapor is generated, and an electrostatic capacity is expressed by insertion of ion of a solute of the organic electrolyte (40) into a space between microcrystalline carbon (94) layers of the carbon material. Accordingly, it is possible to achieve an electrostatic capacity and a withstand voltage which exceed those of the conventional electric double layer capacitor based on the activated carbon system. <IMAGE>

IPC 1-7

H01G 9/155

IPC 8 full level

H01G 11/54 (2013.01); **H01G 2/04** (2006.01); **H01G 9/00** (2006.01); **H01G 11/22** (2013.01); **H01G 11/32** (2013.01); **H01G 11/34** (2013.01); **H01G 11/38** (2013.01); **H01G 11/44** (2013.01); **H01G 11/60** (2013.01); **H01G 11/62** (2013.01); **H01G 11/84** (2013.01)

CPC (source: EP US)

H01G 11/24 (2013.01 - EP US); **H01G 11/32** (2013.01 - EP US); **H01G 11/60** (2013.01 - EP US); **H01G 11/62** (2013.01 - EP US); **H01G 11/84** (2013.01 - EP US); **Y02E 60/13** (2013.01 - EP US)

Cited by

US7923411B2; EP1426334A4; EP1168389A1; CN110875147A; EP1770727A1; US7180725B2; US6547990B2; US6827879B2; WO2004079759A3

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0984471 A2 20000308; EP 0984471 A3 20040204; JP 2000077273 A 20000314; US 6487066 B1 20021126

DOCDB simple family (application)

EP 99117252 A 19990902; JP 24964098 A 19980903; US 38799599 A 19990901